

Employees' Provident Fund

"At EPF, we need to ensure the integrity and availability of our IT systems to enable our staff to work better and deliver top notch reliable service to our 12.4 million members. We have seen early success with our new data replication solutions installed by our partners."

Ravi Kumar T Wickniswasarajah, Senior IT Manager, EPF Malaysia

Business Profile

Company Name:
Employees' Provident Fund (EPF)

Headquarters:
Kuala Lumpur, Malaysia

Industry:
Social security and pension fund manager

Business Environment:

- Operates out of 66 locations across Malaysia.
- Manages savings for 12.4 million members and contributions collected from 400,000+ employers.
- Ranked as the world's 19th biggest pension fund in 2009

Implementation Partner:

- Vision Solutions
- Computer Business Solutions Sdn Bhd,
- Heitech Padu Berhad
- EPF's IT team

Vision Solutions Product:
MIMIX Availability
Double-Take Availability

Critical issue

Protect data pertinent to the savings and contributions of the Provident Fund's 12.4 million members. A reliable infrastructure was necessary to ensure that continuous service is provided in the event of a disaster at its production site.

Results

- Successful replication of core system applications and critical data.
- Met stringent internal objective during disaster recovery simulation exercise.
- Achieved enhanced business continuity.

Technologies

- MIMIX Availability
- Double-Take Availability
- IBM Power Systems server on IBM i
- Intel-based servers on Windows Server 2003
- Microsoft SQL Server
- The Provident Fund System
- SAP

Business Challenge

Headquartered in Kuala Lumpur, Employees' Provident Fund spans across 66 locations in Malaysia to manage savings for 12.4 million members and contributions collected from over 400,000 employers. Malaysia's EPF was ranked as the world's 19th biggest pension fund in 2009.

In 2007, EPF replaced its Provident Fund System (PFS) which was based on mainframes to the current stable of IBM Power Systems servers on IBM i and Intel-based servers. That marked a new journey to create a sustainable computing ecosystem for the Provident Fund.

The Provident Fund System, which is the core enterprise system, is now housed on the IBM Power Systems servers while the members and employers database is stored on the IBM DB/2 platform. Several additional key software applications are hosted by Windows-based servers.

The next step following the major revamp exercise was to provide a reliable disaster recovery and data replication solution. With aggressive Recovery Time Objectives (RTO) and Recovery Point Objectives (RPO) of eight and 24 hours respectively, EPF Malaysia needed to implement a reliable disaster recovery strategy to rely on in the event of a crisis at its production site.

Employees' Provident Fund

Solution

EPF opted for MIMIX Availability from Vision Solutions, Inc. for the data replication disaster recovery system on its IBM Power Systems servers and Double-Take Availability for its Windows-based Intel servers. According to Ravi Kumar T Wickniswasarajah, senior IT manager at EPF Malaysia, MIMIX Availability was selected for its proven track record in IBM i environments. Although the tools from Vision Solutions comprised a small component of the entire IT ecosystem at EPF, its role was vital to ensure that members' data such as personal information and savings contribution were protected.

"One of the toughest decisions was to decide what to replicate as it was simply impossible to replicate every piece of information stored. Of course, all the mission critical information such as our contributors data are sacred and backed up," said Ravi. All member records have been computerized and no longer available on hardcopy which meant the system in place must be foolproof and infallible.

Apart from protecting the Provident Fund System, EPF also used MIMIX Availability to replicate the General Ledger system which is a SAP solution running on the IBM Power Systems server. "The entire exercise took about six months to roll out as there was a lot of interaction with the PFS vendors to determine the files or libraries or data pertaining to the selected applications to be replicated," said Ravi, adding that initial teething problems and constraints on the computing infrastructure were eventually resolved.

According to Ravi, a disaster recovery plan was also established as part of EPF's internal statutory requirement and was set in motion during the cut-over period to the new core system. The structure of EPF's disaster recovery plan is based on the internal Recovery Time Objectives (RTO) and Recovery Point Objectives (RPO). "To achieve the agreed RTO, it was necessary to replicate the database to the disaster recovery hot-site and we chose MIMIX Availability as it had a good track record of performing well in an IBM environment," said Ravi. EPF has two data centers located at different sites that alternate should a disaster strike. "If one site goes down, the other can come up almost immediately," he added. "Our mandate is to protect the savings and contributions of almost half the country's population and if EPF cannot recover the databases in time of a crisis, we could potentially have a national disaster on our hands."



15300 Barranca Parkway, Irvine, CA 92618
1-800-957-4511 ▪ 1-801-799-0300 ▪ visionsolutions.com



◆ High Availability ◆ Disaster Recovery ◆ Systems and Data Management ◆